REMARKS

INTRODUCTION

In accordance with the foregoing, the specification, abstract, title, and claims 1, 2, 4, 8-10, 13, and 15 have been amended. No new matter has been submitted.

Claims 2, 4, 5 and 10 have been indicated as including allowable subject matter. Accordingly, claims 2, 4 and 10 have been amended into independent form. It is respectfully submitted that claims 2, 4, 5 and 10 are now in proper condition for allowance.

Claims 1-16 are pending and under consideration.

OBJECTION TO SPECIFICATION

In accordance with the Examiner's helpful comments, the specification, abstract, and title have been amended to correct for a typographical error, and the title has been amended to be more directed to the claimed invention.

Withdrawal of the outstanding objection is respectfully requested.

OBJECTION TO THE CLAIMS

Claims 1-16 stand objected for a similar typographical error that has been corrected in the pending claims.

Withdrawal of this outstanding objection is respectfully requested.

REJECTION UNDER 35 USC 102

Claim 13 stands rejected under 35 USC 102 as being anticipated by Nakamura et al., U.S. Patent No. 5,049,904. This rejection is respectfully traversed.

It is respectfully submitted that Nakamura et al. at least fails to disclose "wherein the optimal width of the pulse is set according to each head, so that ink is ejected uniformly, based on a computed difference between a first printing density, generated from a first pulse width, and a second printing density, generated from a second pulse width, meeting a predetermined condition."

Withdrawal of this rejection is respectfully requested.

REJECTION UNDER 35 USC 103

Claims, 1, 3, 6-9, 11-12, and 14-16 stand rejected under 35 USC 103 as being obvious

over <u>Nakamura et al.</u>, in view of <u>Wen</u>, U.S. Patent No. 6,312,078. This rejection is respectfully traversed.

Independent claims 1, 8, 13, and 15 have been amended to particularly indicate that an optimal pulse width for the ink cartridge is based on a computed difference between a first printing density, of the printing densities, and a second printing density, of the printing densities, meeting a predetermined condition, with differing scope and breadth.

Accordingly, it is respectfully submitted that neither <u>Nakamura et al.</u> nor <u>Wen</u> disclose, or suggest, at least the claimed optimal pulse width determination being based on the computed difference between a first printing density, of the printing densities, and a second printing density, of the printing densities, meeting a predetermined condition.

The Office Action relies upon <u>Wen</u> to disclose a determination of an optimal printing density based on multiple printing densities.

In particular, <u>Wen</u> discloses in cols. 9 and 10, and in equation (1) that a printing density D can be calculated based on a function of a pulse voltage and the width of the pulse. From multiple printing densities, different pulse voltages, and different pulse widths the density function can be calculated. See <u>Wen</u> col. 10, lines 45-57.

However, <u>Wen</u> does not disclose or suggest computing a difference between two printing densities <u>and</u> determining the optimal density on the computed difference meeting a predetermined condition.

The present application provides examples where this predetermined condition can be whether a first density is greater than a second density plus a predetermined value, for example. See paragraph [0028] for an example, noting that this is only an example and not limiting of the presently claimed invention.

Accordingly, it is respectfully submitted that there would not have been motivation to modify or combine either <u>Nakamura et al.</u> and/or <u>Wen</u> to disclose the presently claimed invention.

Therefore, for at least the above, it is respectfully requested that this rejection be withdrawn and claims 1, 3, 6-9, 11-12, and 14-1 be allowed.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is
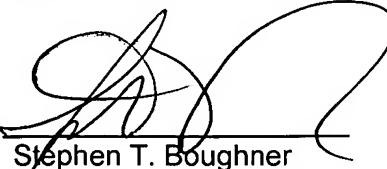
requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: <u>March 30, 2005</u>

By:

Stephen T. Boughner
Registration No. 45,317

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501